

§ 5. It shall be the duty of the said assistant commissioner, immediately on his being notified of his appointment, or at any time thereafter, of the breaking out of the said disease in any place contiguous to the same or within the county he resides, to give public notice of the same in at least one newspaper printed or published in the said county, and to cause notices to be posted up in at least five conspicuous places in said neighborhood, and it shall be his duty to enjoin, in said notice and otherwise, all persons concerned in the care or supervision of neat cattle or sheep not to come within one hundred feet of the said locality without the special permission of the said assistant commissioner.

§ 6. It shall be the duty of the commissioners appointed under this act, whenever they are advised that any such disease has made its appearance within the limits of the State, to publish in the State paper and in at least one paper published in any county where such disease exists, a statement of the methods approved by the New York State Agricultural Society for the treatment of cattle affected therewith, for the isolation of the same, for the disinfection of the premises or buildings in which said cattle are found affected as aforesaid, and for the prevention of the spread of the same through any agencies of whatever kind.

§ 7. The commissioners aforesaid and all such assistants as they may appoint, whenever in their judgment or discretion it shall appear in any case that the disease is not likely to yield to any remedial treatment, or whenever it shall seem that the cost or worth of any such remedial treatment shall be greater than the value of any animal or animals so affected, or whenever in any case such disease shall assume such form of malignity as shall threaten its spread to premises either contagious or infectious or otherwise, are hereby empowered to cause the said animals to be slaughtered forthwith and buried, as above provided, and to do all such things as are mentioned in the fourth section of this act.

§ 8. The said commissioners or their assistants are hereby empowered to enter upon and take possession of all premises or parts thereof where cattle so affected as aforesaid are found, and to cause the said cattle to be confined in suitable enclosures or buildings for any time requisite in the judgment of the said commissioners or their assistants, and prior to the slaughter and burial of the said animals and the full and complete disinfecting and cleansing of such premises; and all persons whether owners of, or interested in such cattle or otherwise, who shall resist, impede, or hinder the said commissioners or their assistants in the execution of their duties under this act, shall be deemed guilty, and on conviction of the same, of a misdemeanor, and shall be punishable with fine not exceeding one thousand dollars, or imprisonment not exceeding the term of six months, or of both, in the discretion of the court before which they shall be adjudged guilty as aforesaid.

§ 9. The commissioners shall have power to establish all such quarantine or other regulations as they may deem necessary to prevent the spread of the disease or its transit in railroad cars, by vessels or by driving along the public highways; and it shall be proper for the Governor of the State by public proclamation as aforesaid, to enjoin all persons concerned or engaged in the traffic or transit of cattle or sheep, not to enter upon any places or take therefrom any such animal or to pass through any such locality, and within such distances from the same as in the said proclamation may be prescribed.

§ 10. The sum of one thousand dollars, or so much thereof as may be necessary, is hereby appropriated to pay to the said commissioners for their services while actually engaged in the duties enjoined upon them in this act, at the rate of five dollars per day to each, and such further sums as may cause them actual expenditures in traveling to and from the places they may be called upon to inspect or visit, and in the printing and publishing of all regulations or notices mentioned

in this act. And the further sum of fifteen thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the treasury not otherwise appropriated to pay for animals slaughtered by the provisions of this act, and the Comptroller is hereby directed to pay for the same on the warrant of the said commissioners.

§ 11. The assistant commissioners are to receive for each and every day while actually engaged in duties provided by this act, the sum of three dollars per day, and all actual expenses and disbursements paid or incurred in the discharge of their duties as aforesaid, which said sums shall be a charge upon the county for which he is appointed, and shall, when duly audited by the board of supervisors of the said county, be paid by the county treasurer.

§ 12. The slaughtering of animals for beef after having been exposed to the contagion, or supposed to have been so exposed, may be permitted by the commissioners or prohibited by them, as they may judge proper.

§ 13. This act shall take effect immediately and shall continue in force for one year.

### CULTIVATION OF MANGEL WURZEL.

The Mangel Wurzel is the crop on which we have latterly in chief depended as the substitute for our failing Turnip crop. Yielding with greater certainty a much heavier produce of food as good as the Turnip, no wonder that it is rapidly growing in favour. It has always been known as keeping good till late in the following season; but, till of late, it has laboured under the stigma of being so excessively relaxing when fed early in the season, as to be more injurious than nutritious until the spring; and even then we have heard of its causing abortion in swine, sheep, and cows, so that it was only under special circumstances that it could be chosen by the cultivator as his main green crop. In 1859, however, we had a frost upon our green crops, which killed them down, and forced their consumption before winter, if it was desired to save them at all; and it was found that even the frosted Mangels, spread in the pastures and in the yards, did ewes in lamb and swine in farrow no harm.

And last year when the Mangel Wurzel crop has been a comparative failure, it has been a common practice to fold sheep on them early in the autumn, leaving Swedes for that later period of feeding for which the Mangel Wurzel had hitherto been deemed especially adapted; and it is found, especially where the root is pulped and mixed in varying proportions with chaff of hay or straw, that no relaxed state of the bowels has, under good management, followed the large and early use of the crop. It is still, however, as the root crop of the summer months that the Mangel Wurzel possesses an especial value. So good a keeper is it, that stock might indeed be kept on it all the year round; for there is no better food for pigs and cattle generally in June, July, and August following the year of its growth. Any season like the

past, therefore, which by its unusual coldness has proved less adapted to the growth of this crop than any we have had for years, is, in its effect on our supplies of cattle food, no less than a national calamity. A crop which in ordinary seasons produces 30 to 40 tons per acre, has during the past year in many cases failed to produce 15; and that on which we generally depend for late spring food, was in many cases fed in autumn by sheep on the fields of its growth.

The cultivation of the Mangel Wurzel is precisely the same as that of the Swedish Turnip, to which we shall refer in detail next month. There is a difference in the seed time, but hardly any in the treatment of the soil, either before it, or during the growth of the crop. Mangels like a stiffer soil than Turnips; but there is the same need of an industrious and forward autumnal cultivation of the land. If the plough is used in spring, it will on clay soils turn up a cloddy surface which is difficult to reduce, and which is a hindrance to the proper cultivation of the crop. A heavy dressing of dung, and a liberal supply of superphosphate, will be well repaid in the future crop, and it is found, in accordance with what is known both of the natural history and the chemistry of the plant (viz., that it is a native of the seashore, and that its ash contains a large proportion of chloride of sodium, or common salt), that the crop will also repay, by additional and more healthy growth, a considerable dressing of common salt, to the extent, indeed, of two or three cwt. per acre.

The seed may be either drilled on the top of each drill or row, or dibbled therein at intervals of 15 to 18 inches—the rows themselves being 28 to 30 inches apart. The proper seed time is about the end of April, in England. No advantage is obtained by sowing too early, as the seed will be longer in the land without germination, and the plants will also be more liable to run to seed. From 6 to 7 lb. per acre should be used; and if it be damped for two or three days before sowing, it will sprout the sooner. The cheapest way to sow it is by the drill, depositing two rows or more at once, either on the flat, or what is better, on the top of the ridgelet over the row of manure; but it is not much more costly, and there are some advantages in depositing the seed by the hand dibble. The women or boys who plant the seed have a stick the length of the interval between the future bunches, and they measure out the place of the next plant by means of it. With the end of it they remove any clod which may lie there, making a little bed for the two or three seeds which they drop in that place, and then covering them up with a little fine earth, and half treading them in.

Mangel seed is very easily buried, and